



Planetary Health Report Card (Medicine): *University of Dundee*



2024-2025 Contributing Team:

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Summary of Findings

Overall Grade	B
Curriculum	A-
<ul style="list-style-type: none"> The University of Dundee School of Medicine (UoD SoM) includes planetary health in its MBChB curriculum. Teaching is delivered via lectures, workshops, and SSCs throughout the programme. Recommendations: There is currently no teaching on patient consultations regarding climate change effects on human health. Include teaching students about strategies for carrying out consultations on environmental end exposure histories in the curriculum. Introduce this during clinical/ communication skills or integrated teacher sessions. More effort could be put into introducing the impacts of climate change on marginalised populations and the local Dundee population outside electively chosen SSCs. 	
Interdisciplinary Research	B-
<ul style="list-style-type: none"> UoD SoM conducts planetary health related research, has a sustainability website and hosts planetary health events, educating staff, students and visitors about planetary health. Recommendations: SoM should endeavour to create an institute/ department dedicated to interdisciplinary planetary health research, education, professional support services, and improving environmental performance of the institution. UoD SoM should further its efforts to include community members impacted by climate and environmental injustice to have decision making powers about the research conducted there. 	
Community Outreach and Advocacy	A
<ul style="list-style-type: none"> There is plenty of Community Outreach work conducted by UoD SoM, including community courses and partnerships with many community organisations promoting planetary health. UoD SoM provides educational materials regarding health exposures to patients. Recommendations: Ensure all hospitals affiliated with UoD SoM (PRI +/- others, in addition to Ninewells) provide accessible teaching materials on health impacts of climate change to patients. Ensure regular communication with students regarding UoD SoM Sustainability. 	
Support for Student-Led Initiatives	B
<ul style="list-style-type: none"> UoD SoM allows students to undertake various SSCs related to planetary health/sustainability, but those often require student initiative. The University and the School of Medicine offer co-curricular opportunities specifically targeting students: projects, panels, events, volunteering and wilderness/outdoors programs. Recommendations: There is not a student organisation dedicated specifically to planetary health and sustainability in healthcare. UoD SoM should support students in the creation, registration and operations of a student-led group or society focussing specifically on planetary health. Moreover, there is no student representation within any sustainability-related decision-making council within the SoM. 	
Campus Sustainability	B
<ul style="list-style-type: none"> Many buildings on UoD grounds have been remodelled/retrofitted in order to be more sustainable, and the institution encourages and incentivises green forms of transportation. UoD and SoM have environmental and sustainability policies on supply procurement. Recommendations: Lobby NHS Tayside to increase the proportion of renewable energy used within it. Ensure SoM has an office for sustainability focussed on Ninewells campus sustainability, similar to overall UoD's Energy and Environment Office. 	

Statement of Purpose

Planetary health is human health.

The Planetary Health Alliance describes planetary health as “a solutions-oriented, transdisciplinary field and social movement focused on analysing and addressing the impacts of human disruptions to Earth’s natural systems on human health and all life on Earth.” This definition is intentionally broad, intended to encompass the multitude of ways that the environment can affect health, including water scarcity, changing food systems, urbanisation, biodiversity shifts, natural disasters, climate change, changing land use and land cover, global pollution, and changing biogeochemical flows. The health of humanity is dependent on our environment, and our environment is changing rapidly and in disastrous ways. Although the World Health Organization has called climate change “the greatest threat to global health in the 21st century,” many medical school’s institutional priorities do not reflect the urgency of this danger to human health.

As future health professionals, we must be prepared to address the impacts of human-caused environmental changes on our patients’ health. This preparation is in the hands of the institutions providing our medical training. It is imperative that we hold our institutions accountable for educating medical students about the health impacts of climate change and other anthropogenic environmental changes, generating research to better understand health impacts and solutions, supporting related student initiatives, embracing sustainable practices as much as possible, and engaging with surrounding communities that are most affected by environmental threats. Because climate change and environmental threats disproportionately affect vulnerable populations (for example, communities of colour, older adults sensitive to health threats, and individuals in low-resource settings), these issues are inherently ones of equity and justice.

With the purpose of increasing planetary health awareness and accountability among health professional schools, we have created a Planetary Health Report Card that students internationally can use to grade and compare their institutions on an annual basis. This student-driven initiative aims to compare health professional schools nationally and internationally on the basis of discrete metrics in five main category areas: 1) planetary health curriculum, 2) interdisciplinary research in health and environment, 3) university support for student planetary health initiatives, and 4) community outreach centred on environmental health impacts 5) medical school campus sustainability.

Definitions & Other Considerations

Definitions:

- **Planetary Health:** is described by the Planetary Health Alliance as “the health of human civilisation and the state of the natural systems on which it depends.” For example, topics such as climate change, declining biodiversity, shortages of arable land and freshwater, and pollution would all fall under the realm of planetary health. Both planetary health and traditional ‘environmental health’ examine the relationship between human health and the external environment, including extreme temperatures, chemicals, vector-borne diseases, etc. Planetary health explicitly concerns itself with the potential health harms associated with human-caused perturbations of natural systems. Therefore, the human health focus of planetary health makes the field well-adapted for the context of medical school education. Throughout this report card, we use the term planetary health to refer to this broad swath of topics, but resources do not need to explicitly include the term “planetary health” to satisfy the metric.
- **Sustainable Healthcare:** As defined by the Academy of Royal Colleges, sustainable healthcare involves ensuring the ability to provide good quality care for future generations by balancing the economic, environmental, and social constraints and demands within health care settings. A sustainable healthcare system maintains population health, reduces disease burden and minimises use of healthcare services.
- **Education for Sustainable Healthcare (ESH):** is defined as the process of equipping current and future health professionals with the knowledge, attitudes, skills and capacity to provide environmentally sustainable services through health professional education, thus working to decrease the enormous environmental impact of the healthcare industry. Planetary Health Education is an integral part of this education rather than an end in itself. This is because knowledge on Planetary Health is required to be able to fully understand the necessity of sustainable healthcare as well as being part of the broader knowledge needed to fully protect and promote health. In summary, ESH is covered by the three Priority Learning Outcomes of the Centre of Sustainable Healthcare below, and Planetary Health Education is embraced in the first learning objective and is a fundamental requirement to achieve learning outcomes 2 and 3:
 1. Describe how the environment and human health interact at different levels.
 2. Demonstrate the knowledge and skills needed to improve the environmental sustainability of health systems.
 3. Discuss how the duty of a doctor to protect and promote health is shaped by the dependence of human health on the local and global environment.
- **Medical School/Department vs. Institution:** When “Medical school” is specified in the report card, this only refers to curriculum and resources offered by the School/department of Medicine and does not include offerings from other parts of the university (e.g. undergraduate departments (USA), other related departments (e.g. Public Health, Population Health departments). In contrast, when “institution” is specified in the report card, we are referring to the university more broadly including all of its campuses. Any resource reasonably accessible by medical students, no matter where in the institution the resource comes from or if it is

specifically targeted for medical students, can meet this metric.

- **Environmental history (Metric #19 in Curriculum Section):** This is a series of questions students are taught to ask during medical encounters that elicits patients' exposures and environmental risk factors. Historically, this has included consideration of exposures like pesticides, asbestos, and lead, though in the modern era shaped by climate change, it can be expanded to include things like wildfire smoke exposure, air pollution and mould after flooding. Key components include place of residence over the lifecourse, occupational history, food and water sources (e.g. meat from industrial feeding operations, regular fishing in contaminated water, access to clean drinking water), and exposure to air pollution. Please be as specific as possible when providing evidence for this metric.
- **Elective:** The word "elective" refers to an optional course or lecture series that a medical student can opt to take part in but is not a requirement in the core curriculum. Generally, these elective courses take place in the preclinical curriculum but vary by school.
- **Core Curriculum:** This refers to taught material that is delivered to the entire cohort of students in one year.
- **Clerkship / Outreach:** This is a term used in the USA to refer to placements that medical students go on e.g. Pediatrics, General medicine, Psychiatry. In the UK these are referred to as rotations, outreach or placements. This is a relatively short (approximately 4-8 weeks) period of study and patient-centred clinical experience that takes place as part of the undergraduate programme.
- **Clinical rotation:** This is a term used to refer to placements that students go on (e.g., ophthalmology, surgery, cardiology).
- **Physiotherapy vs Physical Therapy:** For the purposes of this report card these terms are considered interchangeable. However, physiotherapy will be used primarily.
- **Community organisations:** For most institutions, there are existing groups that are not directly affiliated with the university and exist as a product of what the community the institution exists in cares about or needs. These specific community organisations relevant to this report include those that are focused around some aspect of climate and health preservation. These community organisations can include but are not limited to local mutual aid initiatives, underserved-resource distribution groups, clean-up and nature conservation groups, community gardeners, and other environmental-related organisations. If your institution does not have access to local volunteerships with community groups, please report any community organisations your institution or school has collaborated with.
- **Climate justice:** The idea that certain population groups and geographical locations which are disproportionately more impacted by climate change are already economically and socially disadvantaged. This double vulnerability sits alongside pre-existing social justice concerns and should therefore shift policy and practice to mitigate the inequitable effects of the climate crisis.
- **Extractivism:** The removal of natural resources typically in large quantities. Within anthropology this term is often used in the context of colonialism to refer to

the historic seizing of natural resources, a practice which has developed business models tied to ecological degradation and loss of biodiversity.

- **Global South:** Nations that often have less economic and industrial development and are typically in the southern hemisphere. These nations have been found to be disproportionately impacted by the climate crisis.
- **Low socioeconomic status (SES):** An individual or geographical area that across a variety of socioeconomic factors (e.g., income, education, race/ethnicity) is considered vulnerable. This vulnerability has been correlated to more adverse health outcomes often as a consequence of encountering more barriers in accessing and receiving healthcare.
- **Low and Middle-Income Countries (LMIC):** Countries that have lower degrees of economic affluence.
- **Anthropogenic:** Created through human activity
- **Marginalized communities:** Groups excluded from mainstream economic, educational, social, and/or cultural experiences due to race, gender identity, sexual orientation, age, physical ability, language, and/or immigration status (Sevelius et al., 2020).

Other considerations:

- If there are more than one “tracks” at your institution with two different curricula (for example, Harvard Medical School has a Pathways and HST curriculum track), you can choose to fill out a report card for each track, or fill out just one report card and average the scores received by each track in cases where the scores are different (see the 2021 Harvard or Oxford report cards as examples). Where possible please indicate the proportion of students that are on each track.

Completed in 2022 a [Literature Review by Metric](#) is available for the 2022 medicine report card metrics. We are in the process of updating this review and making it more applicable to all the disciplines. However the review serves as a rough collection of references for further learning and a resource for those advocating for increased planetary health engagement at their institutions.

Planetary Health Curriculum

Section Overview: *This section evaluates the integration of relevant planetary health topics into the medical school curriculum. Today's medical students will be on the frontlines of tackling the health effects of climate and other environmental changes. Therefore, it is critical that medical students are trained to understand the health effects of these changes, as well as planetary health issues and principles more broadly. Topics like the changing geography of vector-borne diseases, the health consequences of air pollution, environmental health inequities, and disaster response principles must be part of every medical school's core curriculum.*

Curriculum: General

1.1. Did your <u>medical school</u> offer elective courses (student selected modules) to engage students in Education for Sustainable Healthcare or Planetary Health in the last year?	
Yes, the medical school has offered more than one elective whose primary focus is ESH/planetary health in the past year. (3 points)	
Yes, the medical school has offered one elective whose primary focus is ESH/planetary health in the past year. (2 points)	
The medical school does not have any electives whose primary focus is ESH/planetary health, but there are one or more electives that include a lecture on planetary health. (1 points)	
No, the medical school has not offered any electives on planetary health or electives that include ESH/planetary health topics in the past year. (0 points)	
Score Assigned:	3
<p><i>Score explanation:</i></p> <p><i>Student Selected Components (SSC) form part of the University of Dundee School of Medicine MBChB curriculum in Years 2, 3 and 5/ScotGEM4. In Years 2 and 3, SSCs are completed over 4 weeks with 1 block in Year 2, and 2 blocks in Year 3. Students can choose a pre-designed SSC titled “The Natural Health Service: ecosystems, biodiversity and human health”. There are also Public Health and Global Health SSCs available, which facilitate projects on sustainability within these areas of medicine. In Year 5 / ScotGEM4, an SSC titled “Introduction to sustainable healthcare” looks at making improvements in patient experience whilst minimising environmental damage. In all years, students are well supported to self-propose SSCs in areas of personal interest.</i></p> <p><i>Dundee also has a compulsory reflective piece called ‘The Bigger Picture’ where students research and reflect on a subject of choice that has the capacity to change medical practice. A set of information resources are given, one of these being about climate change. A brief overview as well as links to The Green Theatre Project and ways to reduce greenhouse gas emissions in clinical practice are given. This is displayed in a format of choice, with students opting for essay-based or creative pieces and is marked by their personal tutor.</i></p>	

Curriculum: Health Effects of Climate Change

1.2. Does your medical school curriculum address the relationship between extreme heat, health risks, and climate change?

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective** coursework. (1 point)

This topic was **not** covered. (0 points)

Score Assigned:

2

Score explanation:

In Year 2, teaching via an interactive workshop on Climate Change and Health gives a comprehensive overview of some of the causes and effects of climate change, both at a global and Scottish level. Heat waves and wildfires are discussed (via a slide each) with links to respiratory, cardiovascular and mental health as well as all causes of mortality.

In year 3, a session on Sustainable Health in Primary Care outlines key carbon hotspots and gives ways to reduce this within primary care. It associates extreme heat with heat-related illness and cardiovascular disease in a diagram outlining the impact of climate change on human health. The same diagram is used in a Year 1 session titled Broadening Horizons which is an introductory session to Planetary Health.

1.3. Does your medical school curriculum address the impacts of extreme weather events on individual health and/or on healthcare systems?

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective** coursework. (1 point)

This topic was **not** covered. (0 points)

Score Assigned:

3

Score explanation:

During the Year 2 Endocrine block there is an interactive workshop on Climate Change and Health. The threat of climate change to human health is discussed with a powerpoint slide on heat waves, wildfires and droughts respectively and two slides on flooding. Discussion is encouraged around the impacts of these events, such as disruption to services, famine and water sanitation with many opportunities for student input.

In year 3, a session on Sustainable Health in Primary Care is given, outlining where carbon hotspots are within primary care and ways to reduce this. A brief discussion is had on a diagram outlining the impact of climate change on human health. In this, severe weather is linked to injuries, fatalities and mental health impacts. The same diagram is used in a year one session titled Broadening Horizons which is an introductory session to Planetary Health.

1.4. Does your medical school curriculum address the impact of climate change on the changing patterns of infectious diseases?

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective** coursework. (1 point)

This topic was **not** covered. (0 points)

Score Assigned:

3

Score explanation:

In Year 2, teaching is given via a workshop on Climate Change and Health. It gives a comprehensive overview of some of the causes and effects of climate change at both a global and Scottish level. Infectious diseases are discussed as part of threats of climate change on human health. Separate, detailed information is given on Malaria and Dengue respectively, also outlining how the spread is changing.

In Year 3, a session on Sustainable Health in Primary Care is given, outlining where carbon hotspots are in primary care and ways to reduce this. A brief discussion is had on a diagram outlining the impact of climate change on human health. It highlights the link between changing climate change and changing vector ecology, with reference to infections such as Malaria, Dengue fever and Lyme's disease. The same diagram is used in a year one session titled Broadening Horizons which is an introductory session to Planetary Health.

1.5. Does your medical school curriculum address the respiratory health effects of climate change and air pollution?

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective** coursework. (1 point)

This topic was not covered. (0 points)	
Score Assigned:	3
<p><i>Score explanation:</i></p> <p><i>In Year 2, teaching is given via a workshop on Climate Change and Health. It gives a comprehensive overview of some of the causes and effects of climate change at both a global and Scottish level. It links climate change with heat waves and air pollution, discussing their roles in exacerbations of respiratory disease. For example, air pollution causes fine particulate matter and a tropospheric ozone. It also briefly mentions how clean air can reduce deaths from air pollution.</i></p> <p><i>In Year 1, air pollution is discussed in the Broadening Horizons lecture introducing Planetary Health, linking it to premature deaths and respiratory disease. It also highlights the NHS' contribution via road travel.</i></p> <p><i>In Years 3 and 4, air pollution is briefly discussed in the Sustainable Health in Primary Care lecture and sway module on Environmental Sustainability in Healthcare respectively. Links are made between air pollution, increasing allergens and morbidity and mortality from respiratory disease.</i></p>	

1.6. Does your <u>medical school</u> curriculum address the cardiovascular health effects of climate change, including increased heat	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework. (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	2
<p><i>Score explanation:</i></p> <p><i>In Year 2, teaching is given via a workshop on Climate Change and Health. It gives a comprehensive overview of some of the causes and effects of climate change at both a global and Scottish level. This topic is discussed as part of the 'health impact of climate change' section. There are slides detailing the impacts of heat waves and air pollution on cardiovascular disease, mortality and reduced exercise ability. An infographic outlines how combating climate change improves health outcomes, mentioning a reduction in cardiovascular disease and extreme heat-related deaths.</i></p> <p><i>This topic is discussed briefly in Years 1 and 3. The Year 1 lecture titled Broadening Horizons has a slide linking air pollution to cardiovascular disease. The Year 3 lecture, Sustainable Health in Primary Care, shows how worsening of cardiovascular disease is linked to climate change through extreme heat and air pollution.</i></p>	

1.7. Does your medical school curriculum address the mental health and neuropsychological effects of environmental degradation and climate change?

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective** coursework. (1 point)

This topic was **not** covered. (0 points)

Score Assigned:

3

Score explanation:

The impact of climate change is discussed in depth in the Year 2 teaching Climate Change and Health . Throughout multiple slides, it details the detrimental effects of floods, droughts, lack of natural spaces and fuel poverty, respectively, on mental health. Impacts such as solastalgia, poor self-esteem and psychological morbidity are highlighted. A direct link is made between combating climate change and an improvement in health outcomes, including mental health.

In this teaching and the Year 1 Broadening Horizons lecture, the impact of climate change and reducing availability of outdoor physical activity opportunities are discussed. This is linked to cognitive decline and neuropsychiatric disorders.

Brief discussion of the benefits of social prescribing and active transport in relation to wellbeing and reducing carbon emissions in a Year 3 lecture on Sustainability in Primary Care.

1.8. Does your medical school curriculum address the relationships between health, individual patient food and water security, ecosystem health, and climate change?

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective** coursework. (1 point)

This topic was **not** covered. (0 points)

Score Assigned:

3

Score explanation:

The University of Dundee School of Medicine has a lecture titled “Broadening Horizons” in the first year curriculum which discusses how human health and the environment interact and linking it to why environmental degradation is harmful to human health before concluding with what doctors can do to advocate for our planet. This session covers a number of things, including: ecosystems,

pollution and biodiversity on climate change, before then connecting it to health. Dundee has a spiralling curriculum which allows for year 2 and 3 to discuss climate change in increasing depth through small group teaching.

1.9. Does your medical school curriculum address the outsized impact of climate change on marginalised populations such as those with low SES, women, communities of colour, Indigenous communities, children, homeless populations, and older adults?

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective** coursework. (1 point)

This topic was **not** covered. (0 points)

Score Assigned:

2

Score explanation:

The University of Dundee School of Medicine uses the first year climate related session, titled "Broadening Horizons" to highlight the mortality rate of climate change in countries with a diagram showing that countries with low SES are disproportionately affected despite not producing as much greenhouse gas. In that same session and a Y2 climate change workshop, general climate related health issues are discussed (e.g. increased infectious diseases, solastalgia) without emphasis on the impact on marginalised populations.

1.10. Does your medical school curriculum address the unequal regional health impacts of climate change globally?

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective** coursework. (1 point)

This topic was **not** covered. (0 points)

Score Assigned:

2

Score explanation:

The University of Dundee MBChB Programme covers the unequal regional health impacts of climate change globally several times in the curriculum. Starting in the Y1 Broadening Horizons session, diagrams are shown that highlight how Africa and Asia have the most climate change related deaths compared to the rest of the world. The Y2 climate change workshop briefly discusses the increasing prevalence of infectious diseases, especially waterborne ones, on the coastline. It also discusses the societal impact as civil conflicts have increased in environmentally difficult areas.

Curriculum: Environmental Health & the Effects of Anthropogenic Toxins on Human Health

1.11. Does your medical school curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides)?

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective** coursework. (1 point)

This topic was **not** covered. (0 points)

Score Assigned:

3

Score explanation:

The University of Dundee MeBChB Programme has a core curriculum lecture titled “Air Pollution: Climate Crisis and Health” which examines how air pollution affects reproductive health in relation to sperm count, preeclampsia, etc in great detail.

1.12. Does your medical school curriculum address important human-caused environmental threats that are relevant to the university’s surrounding community?

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective** coursework. (1 point)

This topic was **not** covered. (0 points)

Score Assigned:

2

Score explanation:

The University of Dundee MBChB Programme addresses important human-caused environmental threats that are relevant to the university’s surrounding community in the Y1 Broadening Horizons session and the Y2 Climate Change and Human Health lecture as it discusses heat related illness and death, malnutrition and civil conflict, water quality impacts, increasing allergens and asthma issues, changes in vector ecology, etc. These sessions also link climate change to severe weather and have segments which describe how healthcare systems affect the climate negatively.

1.13. To what extent does your medical school emphasise the importance of Indigenous knowledge and value systems as essential components of planetary health solutions?

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework. (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	3
<p><i>Score explanation:</i></p> <p><i>The University of Dundee School of Medicine uses the BMSc Global Health programme to emphasise the importance of indigenous knowledge and value systems as essential components of planetary health solutions. There is also evidence of this in the core curriculum, in an Integrated Teacher discussion-based session for Year 3 titled “Indigenous Knowledge and Health Workshop” which goes into depth about the knowledge, wisdom, practices and beliefs developed by indigenous communities. Students participating in this session learn to:</i></p> <ol style="list-style-type: none"> <i>1. Understand the relevance of indigenous knowledge and health to Western medicine</i> <i>2. Describe some examples of indigenous knowledge, health practices and perspectives</i> <i>3. Explain the role of indigenous knowledge and values in promoting planetary health and holistic healthcare</i> <i>4. Recognise the health disparities affecting some indigenous populations</i> <i>5. Discuss the impact of environmental degradation on the health of some indigenous populations</i> <i>6. Discuss the challenges and opportunities of integrating indigenous and Western models of healthcare</i> <i>7. Discuss cultural and ethical considerations with respect to indigenous knowledge and health</i> 	

1.14. Does your <u>medical school</u> curriculum address the outsized impact of anthropogenic environmental toxins on marginalised populations such as those with low SES, women, communities of colour, children, homeless populations, Indigenous populations, and older adults?	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework. (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	3
<p><i>Score explanation:</i></p> <p><i>The University of Dundee MBChB Programme mentions the impact of anthropogenic environmental toxins on marginalised communities primarily in the Y1 Broadening Horizons session that shows countries with the lowest climate impact are impacted the most, as University of Dundee has a spiralling curriculum, this is covered again in the Y2 Climate Change and Health workshop but it is not covered in detail. The Y3 session about Indigenous Knowledge discusses the effect of environmental toxins on indigenous populations as well. Additionally, in the BMSc</i></p>	

programme, students are taught the unequal effect of environmental toxins on marginalised populations in great detail.

Curriculum: Sustainability

1.15. Does your medical school curriculum address the environmental and health co-benefits of a plant-based diet?

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective** coursework. (1 point)

This topic was **not** covered. (0 points)

Score Assigned:

3

Score explanation:

As part of the 1st year cardiovascular teaching of the MBChB Programme, students received a lecture dedicated to 'Nutrition, Health and Sustainability'. Prior to the lecture, students were asked to complete a Sway module. This consisted of a video titled 'Is Meat Really that Bad?' and a reflective task on prior knowledge of sustainable nutrition, and the role of healthcare professionals in diet and planetary health. The lecture was positioned effectively in this block, demonstrating how 'current dietary trends are not only a major problem for planetary health, but also an important risk factor for cardiovascular morbidity and mortality.' The lecture outlined the environmental impacts of the food production industry, with animal products clearly highlighted as the most unsustainable.

A particularly compelling slide was a systematic review of 11 modelled studies which compared different diet types (e.g. vegan, vegetarian, Mediterranean, etc) and the associated change in health indicators. This reflected how a vegan diet was associated with a 19.2% reduction in all-cause mortality risk, CI 95% (Aleksandrowicz et al. 2016). Through scientific and anecdotal excerpts, the individual health benefits and collective planetary benefits of moving towards a plant-based diet were communicated effectively to students. The potential nutritional concerns of plant-based diets were also discussed, with suggestions to mitigate these (e.g. taking B12 supplements if needed). By concluding with practical tips (e.g. swapping cream-based sauces for tomato based ones) students could walk away with actionable points to implement after the session.

1.16. Does your medical school curriculum address the carbon footprint of healthcare systems?

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective** coursework. (1 point)

This topic was **not** covered. (0 points)

Score Assigned:	3
<p><i>Score explanation: Insert explanation here.</i></p> <p><i>2nd year MBChB students participated in an interactive workshop on 'Climate Change and Human Health.' An introductory Sway resource was useful to orientate students prior to the lecture, and encourage reflection on the problems and potential solutions to the unsustainability of modern healthcare. The workshop outlined how healthcare contributes to 4-6% of emissions worldwide, and the concept of carbon literacy was useful in communicating this significant environmental burden to students. One of the sections of the lecture focussed on the 'The Impact of Healthcare Systems on Climate Change'. This gave students an insight into the main sources of pollution from healthcare, current NHS climate targets and practical suggestions for more sustainable practices. Additionally, this topic is addressed in year 1 introductory Planetary Health lecture. Year 4 students complete an online module centered around Sustainable Health including discussion on environmental sustainability and carbon footprint of healthcare.</i></p> <p><i>There are multiple non-core components of the curriculum (Student Selected Components), centered around sustainable healthcare which all cover this topic:</i></p> <ul style="list-style-type: none"> <i>•Year 1: Planetary Health longitudinal SSC</i> <i>•Years 2 and 3: The Natural Health Service: ecosystems, biodiversity and human health</i> <i>•Year 5: Introduction to Sustainable Healthcare</i> 	

1.17. Does your <u>medical school</u> curriculum cover these components of sustainable clinical practice in the <u>core</u> curriculum? (points for each)	Score
The health and environmental co-benefits of avoiding over-medicalisation, over-investigation and/or over-treatment (2 points)	0
The environmental impact of pharmaceuticals and over-prescribing as a cause of climate health harm. Alternatively teaching on deprescribing where possible and its environmental and health co-benefits would fulfil this metric. (2 points) .	2
The health and environmental co-benefits of non-pharmaceutical management of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes. This is commonly known as social prescribing in the UK. (1 point)	1
Environmental impact of surgical healthcare on planetary health and the climate crisis, and how can it be mitigated. (1 point)	1
The impact of anaesthetic gases on the healthcare carbon footprint and ways to reduce anaesthesia's environmental impacts, such as total intravenous anaesthesia or choosing less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions. (1 point)	1
The impact of inhalers on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers. (1 point)	1
Waste production within healthcare clinics and strategies for reducing waste in clinical activities (e.g. single use items in the inpatient or outpatient setting) (1 point)	1
Score explanation:	

1. *While there is mention of responsible referrals and the general trend of increased investigation requests, there could be more clarity in the health and environmental consequences of over-medicalisation in the Dundee curriculum.*
2. *In the 3rd year Sustainability in Primary Care session, there were several references to overprescribing, with '£300 million of dispensed medicines unused and discarded' and '30-50% prescribed medications not taken as intended.' An infographic illustrated the different routes through which pharmaceutical substances can pollute the environment. There was also discussion of a quality improvement project related to polypharmacy, which reduced unnecessary patient medication, ultimately resulting in lower emissions and NHS costs.*
3. *In the 2nd year Climate Change and Human Health workshop, there was a section titled 'Health Co-Benefits' which included an infographic from the BMJ illustrating how environmental impact improvements can translate into better health outcomes. There were also references to the co-benefits of planetary health diets, physical activity and social prescribing (in direct benefit by reducing environmental damage directly but also indirectly by reducing the burden on the NHS).*
4. *In the 4th and 5th year Environmental Sustainability in Healthcare module, there was mention of how 'operating theatres produce a quarter of all hospital waste'. Infographics included NHS Tayside's Green Anaesthesia Guide and the Raigmore Hospital Inverness' Green Theatre Project. These described practical suggestions for improving sustainability in surgical settings, such as considering 'oral instead of IV analgesia where appropriate.'*
5. *In the same teaching as in point 3, there was a slide dedicated to anaesthetic gas comparison. This illustrated how 8 hours of Desflurane equated to 2200 km in an average car compared to 32 km for 8 hours of Sevoflurane.*
6. *In the same teaching as in point 3 and 5, there was a slide dedicated to inhaler comparison. This illustrated how a single metered dose inhaler produced approximately the same amount of emissions as a 175 mile car journey from London to Sheffield. In comparison, a dry powder inhaler equated to only a 4 mile journey in terms of emissions.*
7. *In the same teaching as in point 4, there was a section in the module outlining the nature of waste generation in the NHS and how it is often segregated improperly, i.e. a great proportion of general waste enters orange clinical waste bins, contributing to increased emissions from incineration. While there is scope for more teaching surrounding strategies for reducing waste specifically in clinics, there is mention to examples such as reusable theatre hats.*

Curriculum: Clinical Applications

1.18. In training for patient encounters, does your medical school's curriculum introduce strategies to have conversations with patients about the health effects of climate change?

Yes, there are strategies introduced for having conversations with patients about climate change in the **core** curriculum. (2 points)

Yes, there are strategies introduced for having conversations with patients about climate change in **elective** coursework. (1 points)

No, there are not strategies introduced for having conversations with patients about climate change. (0 points)	
Score Assigned:	1
<p><i>Score explanation:</i></p> <p><i>Strategies for initiating and navigating discussions with patients about climate change is an area for development in the core Dundee curriculum. In terms of elective coursework, there is a Student Selected Component (SSC) block available in Year 2 and 3 that includes the topic of climate sensitive health counselling as a project.</i></p>	

1.19. In training for patient encounters, does your <u>medical school's</u> curriculum introduce strategies for taking an environmental history or exposure history?	
Yes, the core curriculum includes strategies for taking an environmental history. (2 points)	
Only elective coursework includes strategies for taking an environmental history. (1 point)	
No, the curriculum does not include strategies for taking an environmental history. (0 points)	
Score Assigned:	0
<p><i>Score explanation:</i></p> <p><i>Though the importance of taking a thorough social history (e.g. asking about occupational hazards and allergens) is reinforced in communication skills teaching, this could be improved by introducing the specific concept of environmental history and explaining strategies to navigate this topic in consultations.</i></p>	

Curriculum: Administrative Support for Planetary Health

1.20. Is your <u>medical school</u> currently in the process of implementing or improving Education for Sustainable Healthcare (ESH)/planetary health education?	
Yes, the medical school is currently in the process of making major improvements to ESH/planetary health education. (4 points)	
Yes, the medical school is currently in the process of making minor improvements to ESH/planetary health education. (2 points)	
No, there are no improvements to planetary health education in progress. (0 points)	
Score Assigned:	2
<p><i>Score explanation:</i></p> <p><i>The University of Dundee School of Medicine has continuously developed Planetary Health within its curriculum over the last few years, and it is now well implemented across all years of study.</i></p>	

There is scope for improvement in certain areas, as outlined in this PHRC. Reinstating a Sustainability Committee with valuable student input would be a powerful way of driving reform in the curriculum. A specific recent improvement made was updating a Year 2 and 3 SSC titled 'Planetary health: natural environment and human health relationships' for the 24/25 academic year.

1.21. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the core curriculum?

Planetary health/ESH topics are **well integrated** into the core medical school curriculum. (6 points)

Some planetary health/ESH topics are appropriately integrated into the core medical student curriculum. (4 points)

Planetary health/ESH is not integrated and is primarily addressed in **(a) standalone lecture(s)**. (2 points)

There is **minimal/no** education for sustainable healthcare. (0 points)

Score Assigned:

6

Score explanation:

Planetary health features throughout the MBChB programme, reflecting how Dundee's spiral curriculum extends to broader healthcare issues. In Years 1-3, Sustainable Nutrition, Climate Change & Health, and Sustainability in Primary Care are explored through lectures or interactive workshops. In Years 4-5, there is a self-directed learning approach, with an online Environmental Sustainability in Healthcare module and assessment. There is a page dedicated to Planetary Health and Sustainable Healthcare on the University Moodle, which outlines the sessions in each year group and includes the teaching materials for reference, as well as additional useful resources.

1.22. Does your medical school employ a member of faculty to specifically oversee and take responsibility for the incorporation of planetary health and sustainable healthcare as a theme throughout the course?

Yes, the **medical school** has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (1 point)

No, the **medical school** does **not** have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (0 points)

Score Assigned:	1
<i>Score explanation: Dr. Tim Smith (t.j.s.smith@dundee.ac.uk) has been the Lead for Healthcare Sustainability Teaching at the School of Medicine within the University of Dundee since 2020.</i>	

Section Total (60 out of 72)	83.33%
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Back to Summary Page [here](#).

Interdisciplinary Research

Section Overview: *This section evaluates the quality and quantity of interdisciplinary planetary health research at the broader institution. Interactions between health and the environment are complex and multifactorial. While climate change has been extensively studied from an environmental science perspective, planetary health is an emerging field. As leading health institutions with talented researchers and research resources, institutions should fund research studying the health effects of climate change and anthropogenic environmental toxins. This obligation is particularly strong because the public and policymakers are more attentive to climate change when its implications for human health are emphasised.*

2.1. Are there researchers engaged in planetary health research and healthcare sustainability research at your institution?

Yes, there are faculty members at the **institution** who have a **primary** research focus in planetary health **or** sustainable healthcare/vetcare. (3 points)

Yes, there are individual faculty members at the **institution** who are conducting research **related** to planetary health or healthcare sustainability, OR are part of a national/international sustainability working group, but it is not their primary research focus. (2 points)

There are sustainability researchers at the **institution**, but not specifically associated with healthcare/vetcare. (1 point)

No, there are **no** planetary health and/or sustainability researchers at the **institution** at this time. (0 points)

Score Assigned:

3

Score explanation:

The University of Dundee's School of Medicine has faculty engaged in planetary health and healthcare sustainability research. [Tim Smith](#), a faculty member, is completing a Professional Doctorate in Planetary Health and Medical Education at the University of Dundee, with a primary research focus on incorporating planetary health and sustainability into the medical curriculum and assessing its benefits. His research takes a student-centred approach, offering a unique perspective on integrating sustainability into medical education.

2.2. Is there a dedicated department or institute for interdisciplinary planetary health research at your institution?

There is **at least one** dedicated department or institute for interdisciplinary planetary health research. (3 points)

There is **not currently** a department or institute for interdisciplinary planetary health research, but there are **plans** to open one in the next 3 years. (2 points)

There is an Occupational and Environmental Health department , but no interdisciplinary department or institute for planetary health research. (1 points)	
There is no dedicated department or institute. (0 points)	
Score Assigned:	0
<p><i>Score explanation:</i></p> <p><i>The University of Dundee's School of Medicine previously had a Sustainability Committee, which played a role in embedding sustainability in education, research, and professional support services through its Sustainability Strategy (2023-2025). However, it appears that this committee is no longer active.</i></p> <p><i>Similarly, while the Environment Task Group was previously recognised for its role in developing strategies to improve environmental performance, there is no current evidence of its continued existence.</i></p> <p><i>The disbandment of both groups may be linked to the financial difficulties currently facing the University of Dundee, which have likely impacted institutional sustainability efforts.</i></p>	

2.3. Is there a process by which communities disproportionately impacted by climate change and environmental injustice give input or make decisions about the research agenda at your institution?	
Yes, there is a process in which community members impacted by climate and environmental injustice have decision-making power in the climate + environmental research agenda. (3 points)	
Yes, there is a process in which community members impacted by climate and environmental injustice advise the climate + environmental research agenda. (2 points)	
No , but there are current efforts to establish a process for community members to advise or make decisions on the research agenda. (1 points)	
There is no process, and no efforts to create such a process. (0 points)	
Score Assigned:	1
<p><i>Score explanation:</i></p> <p><i>The University of Dundee's School of Medicine engages in community-focused environmental initiatives, such as the Wee Forest Initiative, aimed at encouraging interaction with nature. However, researchers from the University's Botanic Garden and the School of Humanities, Social Sciences, and Law have noted these spaces are underused, and more effort is needed to support community visits. Additionally, healthcare workers and students participated in Ride for Their Lives, advocating for air quality improvements and active travel infrastructure.</i></p> <p><i>While these initiatives demonstrate community engagement in sustainability, there is no formal process for disproportionately affected communities to give input or make decisions about the School of Medicine's research agenda.</i></p>	

2.4. Does your institution have a planetary health website that centralises ongoing and past research related to health and the environment?

There is an **easy-to-use, adequately comprehensive** website that **centralises** various campus resources related to health and the environment including all of the following: upcoming events, leaders in planetary health at your institution, and relevant funding opportunities. (3 points)

There is a website that **attempts to centralise** various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive. (2 points)

The **institution** has an **Office of Sustainability website** that includes **some** resources related to health and the environment. (1 point)

There is **no** website. (0 points)

Score Assigned:

2

Score explanation:

The University of Dundee has two key webpages related to planetary health and sustainability: the [School of Medicine Sustainability](#) page and the [Estates and Buildings Energy & Environment](#) webpage. These sites provide valuable resources on sustainability initiatives, events, policies, and environmental impact reduction. Please note that there is another section: [Sustainability](#) under the Estates and Building website, which contains the Interim Carbon Management Plan.

However, the School of Medicine's sustainability page previously included information on committee leadership, a dedicated PHRC page, and sustainability initiatives, but with the disbandment of the Sustainability Committee, some of this content is now outdated. The Energy & Environment webpage remains informative but may also require updates to reflect recent institutional changes.

*Given that these websites **exist** and **centralise sustainability-related resources**, but are **not fully up-to-date**, then only 2 points can be rewarded.*

2.5. Has your institution recently hosted a conference or symposium on topics related to planetary health?

Yes, the **institution** has hosted at least one conference or symposium on topics related to planetary health in the past year. (4 points)

Yes, the **institution** has hosted at least one conference or symposium on topics related to sustainable healthcare/vetcare in the past year. (3 points)

Yes, the **institution** has hosted a conference on topics related to planetary health / sustainable healthcare/vetcare in the past three years. (2 points)

The **institution** has not hosted any conferences directly, but they have provided financial support for a local planetary health event. (1 point)

No, the institution has not hosted a conference on topics related to planetary health in the past three years. (0 points)	
Score Assigned:	4
<p><i>Score explanation:</i></p> <p><i>The University of Dundee has hosted several events related to planetary health in the past year. Notably, in September 2024, the university organised EcoFest, which featured numerous stalls and activities focused on sustainability, including participation from wildlife organisations and the Dundee Cycle Hub. Additionally, the university hosted the 2024 i-Tree Conference and Urban ReLeaf Plenary at the V&A Dundee. This event provided a significant opportunity for experts from a variety of fields - including urban planners, municipalities, citizen associations, and environmental organisations - to connect and share knowledge on urban sustainability.</i></p>	

2.6. Is your <u>institution</u> a member of a national or international planetary health or ESH/ESV organisation?	
Yes, the institution is a member of a national or international planetary health or ESH/ESV organisation. (1 points)	
No, the institution is not a member of such an organisation. (0 points)	
Score Assigned:	1
<p><i>Score explanation:</i></p> <p><i>The University of Dundee School of Medicine is a member of the International Medical Education Collaboration on Climate and Sustainability (IMECCS), an organisation committed to helping medical schools integrate climate change and sustainability into their curricula through providing educational resources.</i></p>	

Section Total (11 out of 17)	64.71%
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Community Outreach and Advocacy

Section Overview: *This section evaluates medical school engagement in community outreach and advocacy efforts associated with planetary health. Researching and teaching planetary health is necessary but not sufficient. It is critical that institutions also directly engage with communities most affected by environmental health harms. Although climate change is a problem largely created by those with power and resources, its impacts fall disproportionately on under-resourced populations and communities of colour. Institutions should partner with local communities affected by climate change and pollution to share information about environmental health threats, advocate together for change, and provide opportunities for students to be a part of this work.*

3.1. Does your <u>institution</u> partner with community organisations to promote planetary and health?	
Yes, the institution meaningfully partners with multiple community organisations to promote planetary and environmental health. (3 points)	
Yes, the institution meaningfully partners with one community organisation to promote planetary and environmental health. (2 points)	
The institution does not partner with community organisations, but has participating in community focused events relating to planetary health. (1 point)	
No, there is no such meaningful community partnership. (0 points)	
Score Assigned:	3
<p><i>Score explanation:</i></p> <p><i>University of Dundee School of Medicine has multiple ongoing partnerships that aim to promote planetary and environmental health. Therefore, a score of three has been awarded.</i></p> <p><i>The Sustainability Committee - comprises medical school staff members and students working with several community organisations. They strive to raise awareness of planetary health and action strategies to improve sustainability within the school of medicine and our affiliated teaching hospital, Ninewells.</i></p> <p><i>Some of the partnerships are listed below:</i></p> <p><i>International Medical Education Collaboration on Climate and Sustainability - the School of Medicine Sustainability Committee now has access to the IMECCS Resource Bank. This gives full access to a number of powerpoint presentations, regarding health and the climate. This allows ease of integration into teaching and the ability to empower students and staff with the knowledge of climate change and its impact on global health.</i></p> <p><i>The continued participation in Sustainable Dundee: Sustainable Dundee is a coalition of organizations collaborating to address the Climate Emergency by promoting low-carbon lifestyles</i></p>	

and enhancing nature, aiming to help the city reach Net Zero greenhouse gas emissions before 2045.

NHS Tayside:

[Dundee Green Health partnership](#) - project staff are dedicated to raising awareness of the benefits that 'green health' has, to both the public and healthcare staff. As well as the development of referral pathways that aim to get patients immersed in the benefits that being in nature provides.

ReUse strategy - strategy to reduce waste by sharing and 'reusing' unwanted medical equipment.

Recycling bins are in place across NHS Tayside to help staff, patients and visitors to make the right choice at the point of disposal. 70% of NHS Tayside domestic waste is to be recycled or composted by 2025

[Tayside Biorespository \(TBR\)](https://www.dundee.ac.uk/locations/tayside-biorepository) - TBR ensures the availability of a diverse range of human tissue for research. This tissue is obtained from NHS patients undergoing medical procedures that would otherwise result in its disposal. (<https://www.dundee.ac.uk/locations/tayside-biorepository>)

[Tayside Medical Science Centre](https://www.dundee.ac.uk/corporate-information/tascs-strategy) - collaboration of clinical research and management for clinical trials to improve health and well-being. Their five-year strategy plans include promoting sustainability within the workforce. (<https://www.dundee.ac.uk/corporate-information/tascs-strategy>)

Green health partnership - The partnership connects Dundee residents with a variety of activities, including free e-trike sessions, group rides, outdoor gentle exercises, gardening groups, and mindfulness sessions. Additionally, it strives to enhance engagement with green spaces across the city, promoting the benefits of green health and raising awareness of its value within healthcare.

Green champion - a voluntary initiative aimed at reducing the organization's carbon footprint and promoting sustainability. Green Champions dedicate a small amount of time each week, with managerial support, to embed sustainable practices in their work areas, share knowledge with colleagues, and identify opportunities for improvement. Participants gain valuable experience in project management, communication, and leadership while contributing to NHS Tayside's net-zero ambitions.

[Ninewells Community Garden](https://ninewellsgarden.org.uk/) (<https://ninewellsgarden.org.uk/>)

Allotment space on the hospital site tended by volunteers. Open for all to enjoy and boost wellbeing through horticulture. Students are encouraged to join Wednesday afternoon sessions, to learn about gardening, growing produce and sustainability.

Students can work in the community garden as part of their SSC project in years two and three. SSC projects focus on addressing issues related to healthy eating and food poverty while educating students on seed-to-fork initiatives and green health projects in collaboration with third sector organisations. As part of their work, SSC students create soup bags for a community larder in Menzies hill and teach community members how to grow their own produce. This year, 100 bags were given!

Other placements within healthcare improvement include collaborations with:

RSPB - connecting recovering addicts to nature

Perth and Kinross Live active - promoting health through physical activity. Part of the project involves collaboration with Dundee cycle hub and educating the participants in the benefits of cycling for our own health as well as the health of our planet.

Dundee Cycle Hub – promoting cycling group for women to improve physical and mental health as well as encouraging active travel.

Dundee naturalist society - in partnership with the School of Medicine Sustainability Committee, a biodiversity event was held in the Ninewells Community Garden.

Eden Project - An additional wildflower meadow has been planted on the hospital/School of Medicine site. This now includes signage that engages the public and educates them on the benefits of biodiversity.

Botanic Gardens - Living Lab journal - seeking to address concerns such as environmental degradation and climate change by creating a platform for research and innovative practices in sustainability. aims to grow a wee forrest. The Botanic garden Paterson Centre is used regularly for healthcare improvement teaching for students. Students have free access to the gardens.

The Wee Forest initiative -An ongoing collaboration between the University of Dundee Botanic Garden, NatureScot, and Earth watch. The initiative aims to connect people with nature, help communities adapt to climate change and inspire children to care for nature.

[The nature collective](#): ongoing collaboration with the nature collective which has a specific interest in using the arts to educate the public about the environment.

Greener Practice Tayside and Fife - collaborative event ‘ride for their lives’ saw healthcare professionals, students and multiple community groups join together for a cycle event that promoted taking environmental action for our children's health.

V&A Dundee museum - creation of the well-being trail in the green and blue spaces in the museum.

MAXwell centre - The MAXwell centre in Dundee host students from the School of Medicine as part of a Health and Wellbeing SSC. The students help the organisation with a challenge they have whilst the students learn a lot about the role of the community focused organisation that promotes food growing, healthy cooking, youth development and assists with food poverty.

[Urban ReLeaf](#) - Urban ReLeaf is a city-wide citizen-science initiative in Dundee that encourages community members to share their observations and experiences of local greenspaces. By gathering collective insights, the project aims to maximize the benefits of these spaces and ensure they meet the diverse needs of the community.

CAFS2 (Clean Air for Scotland 2) - prominent member of the sustainability committee, Prof Jill Belch, has been invited to formally become a member of this Scottish Government working group.

In September 2025, Prof Belch was congratulated on her public awareness campaign about LEZs by both the Transport Minister and Transport Secretary.

3.2. Does your **institution** offer community-facing courses or events regarding planetary health?

The **institution** offers community-facing courses or events at least once every year. (3 points)

The **institution** offers courses or events open to the community at least once per year, but they are not primarily created for a community audience. (2 points)

The **institution** has promoted community-facing courses or events, but was not involved in planning those courses or events. (1 point)

The **institution/medical school** have not offered such community-facing courses or events. (0 points)

Score Assigned:

3

Score explanation:

The university Botanic gardens held multiple events directed at the whole Dundee community. Some of the events and partnerships listed below:

- [*Dundee naturalists society*](#): a collaboration with the naturalists society that hosted multiple pop up events regarding raising awareness of nature's role in health and wellbeing
 - *The Dundee naturalists provided a number of walks, talks and expert short workshops on identification of critical species.*
 - *They also host Lectures aiming to emphasise the importance of the natural world. These are open to all and are hosted on university grounds.*
- *Green health and wellbeing week: garden events held for local families 11-18th May 2024*
- [*Plant power and nature collective art festival on 18th May 2024*](#)
- [*Art and Nature Collective*](#): workshops, research opportunities and exhibitions aim to use the arts to educate communities about the environment. Protecting the planet is central to their ethos

Grand Rounds within the School of Medicine have, on multiple occasions, explored topics relating to planetary health, all of which are available for public viewing on YouTube.

'Finding nemo - how healthcare is making him harder to find' - 29/09/22

'Tobacco Free Scotland' - 24/04/24

Students for global health - Student society that hosts events opened to the public. They most recently held a health specialties talk that educated on the interconnectivity between healthcare and planetary health.

Climate cafes - faculty members reach out to the wider community to educate them on the harmful impacts of air pollution. Example being Prof Belch who liaisons with school bodies in Dundee,

[campaigning for the implementation of air quality monitors around schools and the enforcement of the 'no engine idling' rule.](#)

Collaborate with a range of community-facing organisations on projects that include a focus on raising awareness of nature's power on our own health; Ninewells Community gardens, Eden project, University of Dundee Botanic gardens, RSPB, Green health partnership, V & A museum, Dundee cycle hub and the MAXwell centre

[Big Biodiversity Bash](#): public event held on the 13th July 2024 at Ninewells Community Garden, in collaboration with; the eden project, the nature collective, RSPB and more.

Newspaper articles the School of Medicine has participated/assisted in writing:

1. <https://www.thecourier.co.uk/fp/politics/scottish-politics/4314919/air-quality-test-schools-dundee-perth-dunfermline/>
2. <https://www.thecourier.co.uk/fp/business-environment/environment/4866711/dundee-lez-protecting-children/>
3. <https://www.thecourier.co.uk/fp/lifestyle/5087859/wood-stove-fans-dundee/>
4. <https://www.bbc.co.uk/news/uk-scotland-67934837>
5. <https://www.rcpe.ac.uk/news/doctors-call-scottish-government-reconsider-its-decision-drop-ban-wood-burners-homes>

3.3. Does your **institution** have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications?

Yes, all students **regularly** receive communication updates dedicated to planetary health and/or sustainable healthcare. (2 points)

Yes, planetary health and/or sustainable healthcare topics are regularly included in communication updates to **some courses**. (1 point)

Students **do not** receive communications about planetary health or sustainable healthcare. (0 points)

Score Assigned:

1

Score explanation:

The School of Medicine provides resources for students to explore at their own pace. However, with the suspension of direct communication about planetary health through the newsletter, a score of 1 has been assigned.

The [School of Medicine website](#) has a section dedicated to update users with current sustainability activities.

[Weekly student newsletter](#): Frequently contains information relating to planetary health. Most recently detailing Dundee academics in a new Scottish climate science podcast. The podcast series aims to “help listeners build a better understanding of some of the complex issues around climate change and provide insight into what action people can take to help cut emissions and adapt to the impacts of climate change”. The newsletter is always headed with images of nature and staff and students are encouraged to send in their own photographs of the natural world.

Sustainability corridor - a newly refurbished corridor in the medical school that features a colourful window display, detailing the schools sustainability goals in each pane. The UN goals are also displayed. In addition to this there is a regularly updated TV screen which displays sustainability news for all passers by to see.

[Sharepoint accessible through a QR code](#), is available for students, providing information on planetary health

Grand rounds: As previously explained these are available for all to see on Youtube.

3.4. Does the institution or main affiliated hospital trust engage in professional education activities targeting individuals post graduation with the aim of ensuring their knowledge and skills in planetary health and sustainable healthcare remain up to date during their professional career?

Yes, the **institution** or **main affiliated hospital trust** offers multiple in-person or online courses relating to planetary health and/or sustainable healthcare for post-graduate providers, including at least one with a primary focus of planetary health. (2 points)

Yes, the **institution** or **main affiliated hospital trust** offers one course relating to planetary health and/or sustainable healthcare for post-graduate provider. (1 point)

There are **no** such accessible courses for post-graduate providers. (0 points)

Score Assigned:

2

Score explanation:

The University of Dundee and Ninewells hospital engage in educating and keeping postgraduate knowledge and skills on climate change up to date by providing post graduate courses, lectures and articles, thus a score of 2 has been assigned.

- *The University of Dundee provides post graduate courses such as Sustainability: Climate Change and Transitions to Net-Zero Economies MSc. This course covers how the governments and industry are mobilising to reduce greenhouse gas emissions, and how to make the economy more sustainable.*
- *There are also many events and lectures offered throughout the year with a focus on climate change and sustainability.*
- *New information about climate change and research related to it can be found on the [UoD website](#)*
- *The University of Dundee had an EcoFest on the 11th of September 2024 where there were stalls about sustainable living and wildlife which helps with educating about planetary health.*
- *NHS Tayside also regularly advises its staff on reducing energy consumption. It focuses on teaching staff how they can save energy at home and in the workplace. This is relevant as 66% of NHS staff are postgraduates.*

3.5. Does your institution or its affiliated teaching hospitals have accessible educational

materials for patients about environmental health exposures?	
Yes, the medical school or all affiliated hospitals have accessible educational materials for patients. (2 points)	
Some affiliated hospitals have accessible educational materials for patients. (1 point)	
No affiliated medical centres have accessible educational materials for patients. (0 points)	
Score Assigned:	2
<p><i>Score explanation:</i></p> <p><i>The University of Dundee School of Medicine has accessible educational materials for patients across multiple clinics including Ninewells and the broader NHS tayside.</i></p> <p><i>There is access to educational materials for patients available at Ninewells hospital and the School of Medicine.</i></p> <p><i>Examples of available materials:</i></p> <ul style="list-style-type: none"> <i>Air pollution information - there are leaflets and banners that describe the health risks associated with air pollution and ways to minimize the exposure to pollution. They are available both at the hospital and are displayed in adult outpatient clinics.</i> <i>Passive smoking- information on the dangers of smoking and passive smoking and advice on smoking cessations.</i> <i>Environmental - oncology clinics and food banks display leaflets that provide resources on environmental health.</i> <p><i>There are many resources available that offer insights into the university's approach to environmental health education and patient engagement.</i></p>	

3.6. Does your <u>institution</u> or its <u>affiliated teaching hospitals</u> have accessible educational materials for patients about the health impacts of climate change?	
Yes, the medical school or all affiliated hospitals have accessible educational materials for patients. (2 points)	
Some affiliated hospitals have accessible educational materials for patients. (1 point)	
No affiliated hospitals have accessible educational materials for patients. (0 points)	
Score Assigned:	1
<i>Score explanation:</i>	

The information booth at Ninewells provides materials such as leaflets for patients about the health impacts of climate change. Such as the effects of pollution and passive smoking on health. It also provides strategies to reduce exposures.

Section Total (12 out of 14)

85.71%

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Support for Student-Led Planetary Health Initiatives

Section Overview: *This section evaluates institutional support for student-led planetary health initiatives, such as funding, fellowships, programming, and student groups. Planetary health is a young field and, as young people facing a future deeply shaped by climate change, students are often some of the first at an institution to engage with it. Institutions should provide support for students to engage in sustainability quality improvement (QI) initiatives, discover mentors in their area of interest, and receive funding for planetary health projects.*

4.1. Does your **institution** offer support for students interested in enacting a sustainability initiative/QI project?

Yes, the **institution** *either* offers grants for students to enact sustainability initiatives/QI projects *or* sustainability QI projects are part of the core curriculum. (2 points)

The **institution** encourages sustainability QI projects (to fulfil clerkship or longitudinal requirements) and offers resources to help students succeed in these projects, **but** there is no student funding available and there is no requirement to participate. (1 point)

No, **neither** the medical school or the institution offer opportunities or support for sustainability initiatives or QI projects. (0 points)

Score Assigned:

1

Score explanation:

UoD offers planetary health focused SSCs and various opportunities to work with primary and secondary care teams for 4 week sustainability improvement projects.

Examples of recent sustainability student projects:

- *Supporting GP practices to use the green impact toolkit to become sustainable*
- *ED project – reducing single use plastic cups in the ED and reducing energy usage within the ED (e.g. PCs on standby)*

Longitudinal Integrated Clerkships are offered as part of Year 4/ScotGEM year 3. Within these LIC placements there is a compulsory QI project which is related to the location of service. During the initial briefing of this QI project there is suggestion towards conducting a sustainability focused project.

A fully funded master's and PhD scholarship for regenerative innovation was offered directed toward those passionate regarding planetary health challenges. But this funded project was a single space directed at those from low income/specific ethnic backgrounds.

Summary: UoD does not have any compulsory sustainability modules nor does it provide adequate funding in favour of sustainability initiatives but offers ample opportunities to enact a sustainability focused project.

4.2. Does your institution offer opportunities for students to do research related to planetary health and/or sustainable healthcare/vetcare?

The **institution** has a **specific** research program or fellowship for students interested in doing planetary health/sustainable healthcare/vetcare research. (2 points)

There are research opportunities for students to perform research related to planetary health/sustainable healthcare, but these **require student initiative** to seek these out and carry them out in their spare time. (1 point)

There are **no opportunities** for students to engage in planetary health/sustainable healthcare research. (0 points)

Score Assigned:

1

Score explanation:

During the final year of study students can select a sustainable healthcare SSC which includes producing an environmentally focused QI project at its core. There is no guarantee that every student applying for this SSC will be able to complete it but there is additional scope for students to self-propose SSCs related to topics of their choosing.

4.3. Does the institution have a webpage where students can find specific information related to planetary health and/or sustainable healthcare/vetcare activities and mentors within the institution? For example, projects achieved, current initiatives underway at the medical school and/or contact of information of potential mentors.

The institution has a webpage with specific information related to planetary health or sustainable healthcare/vetcare that includes up-to-date information on relevant initiatives and contact information of potential mentors. (2 points)

There is an institution webpage that features some information on projects and mentors within planetary health and sustainable healthcare within the medical school, but it lacks key information. (1 point)

There is **no institution** specific webpage for locating planetary health and/or sustainable healthcare projects or mentors. (0 points)

Score Assigned:

2

Score explanation:

UoD has a well established [sustainability webpage](#) including a description of the university's sustainability mission aims as well as links to many sustainability focused activities occurring within the university.

The projects are [described in detail](#) including details on how to get involved with future projects and the successes of previous projects. There is also key information on available planetary health education opportunities within each year of the MBChB degree.

Within the summary webpage there is a [sharepoint link](#) accessible by university students with more in depth information surrounding projects and whom to contact for more information.

Examples of the projects listed:

- ReUse
- Ride for their lives
- Sustainability project achievements
- My Green Lab freezer challenge
- Plants for work

Summary: UoD's sustainability webpage offers access to specific information regarding sustainability within a healthcare environment as well as wider planetary health initiatives, packaged in a readable format for all to see. The information is updated semi-regularly and access to contact information is available for university students. There is room for improvement surrounding specific dates and timelines but there are accessible information links and active feedback taken on board.

4.4. Does your institution have registered student groups dedicated towards fostering a culture of planetary health engagement, scholarship, and advocacy on campus, supported by faculty advisors?

Yes, there is a student organisation **with faculty support** at my medical school dedicated to planetary health or sustainability in healthcare. (2 points)

Yes, there is a student organisation at my medical school dedicated to planetary health or sustainability in healthcare but it **lacks faculty support**. (1 point)

No, there is **not** a student organisation at my institution dedicated to planetary health or sustainability in healthcare. (0 points)

Score Assigned:

0

Score explanation:

UoD does not have a specific student body committee with a focus on planetary health. There is good faculty support for students in general with regards to completing sustainability projects and initiatives but no specific student group. There are other generally sustainable student groups but these are not specific to the topics of global health.

4.5. Is there a student liaison representing sustainability interests who serves on a department or institutional decision-making council to advocate for curriculum reform and/or sustainability best practices?

Yes, there is a student representative that serves on a department or institutional decision-making council/committee. (1 points)	
No, there is no such student representative. (0 points)	
Score Assigned:	0
<p><i>Score explanation:</i></p> <p><i>There was previously a sustainability committee at the School of Medicine with student representation however this has since been disbanded.</i></p>	

4.6. In the past year, has the <u>institution</u> had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each)	Score
Projects where students are able to gain experience in organic agriculture and sustainable food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects.	1
Panels, speaker series, or similar events related to planetary health that have students as an intended audience.	1
Events in which students learn directly from members of a local environmental justice community about the climate and environmental challenges they face, and how health professionals can partner with their community to address these exposures and impacts.	1
Cultural arts events, installations or performances related to planetary health that have students as an intended audience.	1
Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.	1
Wilderness or outdoors programs (e.g., that organise hiking, backpacking, kayaking, or other outings for students)	1
<p><i>Score explanation:</i></p> <p><i>a) UoD offered various projects surrounding planting and agriculture. Directions to organisations and events held outwith the university were also clearly advertised on the sharepoint:</i></p> <ul style="list-style-type: none"> · <i>Plants for work</i> · <i>Ninewells hospital community garden</i> · <i>Collaboration with community gardens, Eden project botanic gardens, RSPB, Green health partnership and V&A</i> · <i>How to be a conscious consumer guide – detailing environmentally productive diet choices and directions to companies actively working to improve global health through their produce choices</i> 	

b) Examples of sustainability focused events held the past year:

- *Sustainable menstrual campaign 8/10/25 – 10/10/25 including lecture from Dr Nicole Allison*
- *Green careers week w/c 30/9/2025 – daily lunchtime sessions from sustainability focused roles discussing organisational activities*
- *Lectures surrounding topics such as climate change and air pollution conducted with the Scottish government net zero committee*
- *Grand rounds has conducted multiple sustainability focused discussions which are available to view at any time via the youtube channel*

c) The university actively works with community engagement projects and focuses on the whole community of tayside with regards to planetary health.

d) There are three new pieces of art on display across the ninewells campus including a piece from Katie Parkin – Auchmithie, which dramatically envisions the beauty of Scotland's coast whilst expressing the changes due to erosion and reimagine the common perspectives of nature as untouchable.

Sustainability week held alongside the opening of the sustainability corridor in Ninewells offered artistic and factual information surrounding planetary health.

e) This year UoD held many specific events directed at anthropogenic environmental impacts:

- *Green lab – freezer challenge directed at reducing the energy consumption of freezers within the SoM labs.*
- *Student project on eliminating unnecessary waste in the plastics ward*
- *Green ward toolkit designed to empower staff challenging the environmental impact of their wards*
- *Herald higher education research conducted by Prof Jill Belch and others – looking at the impact of high air pollution on hospital admissions related to lung conditions. The data supports the necessity of LEZ in Dundee to reduce the impact of vehicle pollution on the local environment*

f) UoD endorses and supports the Wilderness and expedition medicine society (WEMS), a student-focused society aiming to spur interest in wilderness medicine via the organisation of practical days out.

The ScotGEM course is directly aimed at work in rural GP, with many tutors across Scotland encouraging students within practices to engage with nature.

Section Total (10 out of 15)

66.67%

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Campus Sustainability

Section Overview: This section evaluates the support and engagement in sustainability initiatives by the institution. The healthcare industry is a major contributor to greenhouse gas emissions as well as pollution that harms local, regional, and global ecosystems. While healthcare is, by nature, a resource-intensive endeavour, the healthcare sector is well poised to lead the world to a more sustainable future. This will involve scrutinising every aspect of how our systems operate, from where we source our energy, to how we build our infrastructure, to what companies we invest in. Our medical schools, clinics, and hospitals must set the standard for sustainable practices, and show other sectors what is possible when it comes to minimising environmental impact.

5.1. Does your <u>institution</u> have an Office of Sustainability?	
Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is at least one designated staff member for sustainability at the hospital. (3 points)	
There is an Office of Sustainability with one or more full-time staff dedicated to campus sustainability, but no specific staff member in charge of hospital sustainability. (2 points)	
There are no salaried sustainability staff , but there is a sustainability task force or committee. (1 point)	
There are no staff members or task force responsible for overseeing campus sustainability. (0 points)	
Score Assigned:	1
<p><i>Score explanation:</i></p> <p><i>Medical School - The University of Dundee School of Medicine disbanded its Sustainability Committee in October 2024 due to its position in the School structure. The Culture Committee merged with the committee, and now look at sustainability as part of their aims. There are plans to reform it. Prior to disbanding, there were 12 members including a medical student.</i></p> <p><i>University of Dundee- Dundee has an “Energy and Environment Office” which aims to help staff and students become more environmentally aware. The University has a Carbon Action and Sustainability Management Board, overseeing Dundee University’s strategy which is supported by the Carbon Action Planning Group. There are also Sustainability Champions within various schools.</i></p>	

5.2. How ambitious is your <u>institution's</u> plan to reduce its own carbon footprint?	
The institution has a written and approved plan to achieve carbon neutrality by 2030 (5 points)	
The institution has a written and approved plan to achieve carbon neutrality by 2040 (3 points)	
The institution has a stated goal of carbon neutrality by 2040 but has not created a plan to reach that goal or the plan is inadequate (1 point)	

The institution/medical school does not meet any of the requirements listed above (0 points)	
Score Assigned:	3
<p><i>Score explanation:</i></p> <p><i>University of Dundee School of Medicine has chosen 2045 to achieve net zero carbon emissions, and follows a sustainable development and environmental stewardship policy as per the University of Dundee Environmental and Sustainability Policy Statement.</i></p> <p><i>Whilst the School of Medicine follows the Sustainability strategy 2023-25, they also work alongside NHS Tayside which follows a plan detailed in the NHS Tayside Climate Emergency and Sustainability Report.</i></p> <p><i>Additionally, the University of Dundee follows the Carbon Action Management Plan, assisting its aims of reaching net zero by 2045 and a 75% reduction in GHG emissions by 2035 compared to University levels in 2015.</i></p>	

5.3. Do buildings/infrastructure used by the institution for teaching (not including the hospital) utilize renewable energy?	
Yes institution buildings are 100% powered by renewable energy. (3 points)	
Institution buildings source >80% of energy needs from off-site and/or on-site renewable energy. (2 points)	
Institution buildings source >20% of energy needs from off-site and/or on-site renewable energy. (1 point)	
Institution buildings source <20% of energy needs from off-site and/or on-site renewable energy. (0 points)	
Score Assigned:	0
<p><i>Score explanation:</i></p> <p><i>The School of Medicine is located on the NHS Tayside grounds. The NHS Tayside Climate Emergency and Sustainability Report states that they “aim to use renewable heat sources for all the buildings owned by the buildings owned by NHS Tayside by 2038 (Page 9). Additionally, in 2023/24, NHS Tayside used 190,409.3 MWh of energy, which was a decrease of 1.95% in comparison to 2022/23. In 2023/24, NHS Tayside generated 67,0042 kWh of energy from renewable technologies kWh. This results in NHS Tayside sourcing 0.03% from renewable sources.</i></p> <p><i>Other long term plans regarding infrastructure include NHS Tayside working with their 3 local authorities, and respective Local Energy Efficiency Plans, and other associations to find collective solutions to reducing the future emission impact on the national grid and benefit wider local communities.</i></p>	

5.4. Are sustainable building practices utilised for new and old buildings on the institution's campus, with design and construction of new buildings and remodelling of old buildings conforming to a published sustainability rating system or building code/guideline?

Yes, sustainable building practices are utilised for new buildings on the institution's campus and the **majority** of old buildings **have been retrofitted** to be more sustainable. (3 points)

Sustainable building practices are utilised for new buildings on the institution's campus, but most old buildings have **not been retrofitted**. (2 points)

Sustainable building practices are **inadequately or incompletely** implemented for new buildings. (1 point)

Sustainability is **not considered** in the construction of new buildings. (0 points)

Score Assigned:

3

Score explanation:

University of Dundee School of Medicine is located within NHS Tayside facilities. As mentioned in the previous PHRC, "Since 2020 all new builds and major refurbishments across NHS Tayside are required to be carbon net zero [University of Dundee](#). No new construction projects were undertaken in NHS Tayside, but there were roughly around 10 refurbishment projects in 2023/24. NHS Tayside ensured the refurbishments were more eco-friendly by using sustainable construction practices, such as [installing LED lighting, heat pumps, speed drives, and improving insulation above Scottish Technical Standards](#) (See: Page 31 of linked report).

For primary care locations, air source heat pumps, LED lighting, new windows, new doors, insulation and solar PV were used to decarbonise the buildings.

5.5. Has the institution implemented strategies to encourage and provide environmentally-friendly transportation options for students and reduce the environmental impact of commuting?

Yes, the institution has implemented strategies to encourage and provide **environmentally-friendly transportation options** such as safe active transport, public transport, or carpooling and these options are well-utilised by students. Alternatively, the campus location is not amenable to unsustainable forms of transportation by default. (2 points)

The institution has implemented **some** strategies to provide environmentally-friendly transportation options, but the options are **unsatisfactorily** accessible or advertised. (1 point)

The institution has **not** implemented strategies to encourage and provide environmentally-friendly transportation options. (0 points)

Score Assigned:

2

Score explanation:

The University of Dundee offers a cycle to work scheme to staff, as well as providing a bike pool. There are over 20 publicly accessible electric car charging points on Main Campus and at the Botanical Gardens. There is also a University of Dundee Liftshare website. NHSTayside and UoD MedicalSchool staff actively engage in the Cycle to Work Scheme, and have caresharing/pooling options.

At NHS Tayside, there are regular public buses every 15-20 minutes to and from Ninewells Hospital. Other NHS Tayside facilities such as Perth Royal Infirmary used to have a bus service, which has now been cancelled. NHS Tayside has continued to support IT infrastructure to reduce in person meetings, increased access of Near Me software reducing travel emissions for staff and patients alike, promoted the Cycle to Work scheme, purchased ebikes, panniers, helmets, locks, and storage for sites across NHS Tayside, and further supported the Go NHS Tayside website which helps people plan their journey to hospital sites.

Moreover, the NHS Transport team is working to remove all petrol and diesel fuelled cars from the NHS Tayside fleet by 2025 and NHS Tayside remains committed to the target.

5.6. Does your institution have an organics recycling program (compost) and a conventional recycling program (aluminium/paper/plastic/glass)?

Yes, the institution has **both** compost **and** recycling programs accessible to students and faculty. (2 points)

The institution has **either** recycling **or** compost programs accessible to students and faculty, but not both. (1 point)

There is **no** compost or recycling program at the medical school. (0 points)

Score Assigned:

1

Score explanation:

University of Dundee School of Medicine has an aim to achieve a recycling rate of 80% and are working with waste contractors to reduce their total waste output (Medical School Sustainability Strategy 2023-25). The University of Dundee School of Medicine has a conventional recycling programme with clearly labelled bins around the institution. In terms of compost, the School does not currently have an organic recycling programme, but NHS Tayside kitchens do have compost facilities. Staff and students cannot directly access these sites.

The University of Dundee has a waste policy and a Recycling and Disposal of Waste Guide. The Dundee School of Life Sciences (SLS) has food waste bins, but the overall University does not have a compost because weeds were being composted and then spreading around the allotments. There is also a conventional recycling program.

5.7. Does the institution apply sustainability criteria when making decisions about the campus food and beverage selections (e.g. local sourcing, reduced meat, decreased plastic packaging)?

Yes, the institution has **adequate** sustainability requirements for food and beverages, including meat-free days or no red-meat, and **is engaged** in efforts to increase food and beverage sustainability. (3 points)

There are sustainability guidelines for food and beverages, but they are **insufficient or optional**. The institution **is engaged** in efforts to increase food and beverage sustainability. (2 points)

There are sustainability guidelines for food and beverages, but they are **insufficient or optional**. The institution is **not** engaged in efforts to increase food and beverage sustainability. (1 point)

There are **no** sustainability guidelines for food and beverages. (0 points)

Score Assigned:

2

Score explanation:

The University has sustainable guidelines for food and beverages.

The University's suppliers are members of The University Caterers's Organisation (TUCO) and Advanced Procurement for Universities and College (APUC), who have sustainable policies.

- [*TUCO's sustainability credentials*](#)
- [*APUC's sustainability policy*](#)

The University is engaged in reducing the impact of damage to the environment, with an onsite Conference and Hospitality team who are part of the Environmental Task Group. This Environmental Task Groups conducts regular environmental reviews.

The Conference and Hospitality team have several initiatives, as outlined below;

"Food:

- *Wherever possible, the C&H team use local fresh and Fairtrade ingredients with menus meeting the Healthy Living guidelines*
- *All hospitality, conferences and cafés on campus use Fairtrade tea and coffee.*
- *All coffee across the campus served by the hospitality team is from [*Coffee Conscience*](#). This Scottish based company offers Fairtrade beans (roasted in Dundee) and a percentage of revenue goes to community projects in the UK and abroad.*
- *All soups use fresh ingredients, in most instances the soups are vegetarian and vegan.*
- *All menus across campus offer vegetarian, vegan and gluten free options and we only use vegan mayonnaise, free range milk and free-range eggs.*
- *Palm oil has been phased out of menus.*
- *We are committed to minimising all food waste and carefully monitoring portion control.*

Service:

- *Coffee cups are fully compostable with compostable lids.*
- *The paper plates and napkins are compostable.*
- *The plastic containers which the food is delivered on (and plastic cutlery) are made from recycled plastic and are washed and reused and are also recyclable.*
- *The Vegware drinking cups are compostable.*
- *We use paper straws rather than plastic.*
- *We serve water in refillable glass bottles free of charge with catering orders.*

- *Water urns are used during conferences.*
- *There is an option for soft drinks on the menu for hospitality and conferences to be in glass bottles.*

Waste:

- *Food waste goes into 'Ecolander' bags which are compostable and put in food waste bins.*
- *Any general waste goes in clear bags and the University will not uplift them if there is any contamination in them, so the team is careful to make sure this does not happen.*
- *We have introduced more recycling bins in the Dalhousie Building.*
- *Any glass waste goes into dedicated glass skips for recycling Transport:*
- *We use an electric van wherever possible (distance allowing) for all deliveries across the Dundee campus, Kirkcaldy campus and Ninewells Hospital."*

Information regarding sustainable food policy at the University of Dundee can be found on their [website](#).

The University also has a [Fairtrade Policy](#) which they review annually.

- *In all campus shops and vending machines, Fairtrade options are being provided, even Fairtrade clothing merchandise is being sold in the student union shop.*
- *All University events have Fairtrade tea and coffee served.*
- *Campaigning for Fairtrade is done on a regular basis.*
- *There is also a Fairtrade Steering Group*

The School of Medicine itself has some sustainability guidelines "Sustainable Events, Food and Beverage Policy; Medical School, University of Dundee 2023-2025" which encompasses all the food and beverage provided at the catering centers in the Ninewells campus as well as the Medical School Catering

The policy objectives include, but, are not limited to

- *Meat Free Mondays*
- *Repurposing of coffee grounds, and banana peels*
- *Banning Plastic bottles*
- *Conversion of cooking oil to biofuel*
- *Provision of non dairy milk*
- *Replacement of unsustainable palm oil*

Currently, dairy milk alternatives are being provided, sugary drinks have been removed from vending machines and new water dispensers have been placed around campus to facilitate decreased plastic water bottles.

The Espresso Lab, the School's cafe, has several sustainable criteria it meets.

"Our coffee is all fair trade and responsibly sourced • Our coffee cups are fully compostable • Our coffee cup lids are made of Cornstarch • Our salad boxes are made from recycled bottles and can be recycled • All our granolas, fruit pots, and yoghurts are supplied in containers that are made of rPet which means they are made from recycled plastic and can be recycled, 100% circular meaning we are not creating any plastic waste • Our take-away containers are EPP Infinity and are 100% recyclable"

5.8. Does the institution apply sustainability criteria when making decisions about supply procurement?

Yes, the institution has **adequate** sustainability requirements for supply procurement **and** is **engaged** in efforts to increase sustainability of procurement. (3 points)

There are sustainability guidelines for supply procurement, but they are **insufficient or optional**. The institution is **engaged** in efforts to increase sustainability of procurement. (2 points)

There are sustainability guidelines for supply procurement, but they are **insufficient or optional**. The institution is **not engaged** in efforts to increase sustainability of procurement. (1 point)

There are **no** sustainability guidelines for supply procurement. (0 points)

Score Assigned:

3

Score explanation:

The University of Dundee does apply sustainability criteria in regards to decision making concerning supply procurement and there are efforts being made to increase sustainability of procurement.

In the [Procurement Policy](#) of the University it is stated that “One of the University’s strategic aims is to deliver sustainable ambition through exercising environmental responsibility.”

In the Environmental and Sustainability Policy of the University, there are numerous aims regarding Procurement i.e. “to promote sustainable procurement; Reduce the use of energy and utilities: Promoting trade justice by achieving and retaining fair-trade status for the University and Students Union.”

The Procurement meets this policy through “ensuring sustainability issues are considered at every stage of the Procurement process and in every contract undertaken by Procurement, ensuring all contracted and transactional suppliers added to the approved University of Dundee purchasing system are required to sign up to the Sustain Supply Chain Code of Conduct, through contract management review existing contracts and University practices relating to Procurement to establish a more sustainable approach.”

In the School of Medicine Sustainability Strategies, sustainable procurement is highlighted.

“When spending University money (even if funds are provided by a research sponsor) we have a responsibility to get the best value. This does not always mean buying the cheapest and the suitability of the product or service, its reliability, flexibility of service, environmental impact, health and safety, insurance levels and associated costs are all critical factors in the decision to buy.”

“In alignment with the European Union's Sustainable Development Strategy (EU SDS)1, true sustainable procurement we will take into consideration economic, environmental, and social factors.”

There is also a sustainable procurement checklist created by the university.

- *Could I repair or refurbish the old item instead of purchasing a new one?*

- *Can I loan, lease or buy it from someone else/another department at the University?*
- *Is the product reusable or durable, have a long economically useful life and/or can be economically repaired or upgraded, compared to alternatives?*
- *All electrical goods must be A rated.*
- *Does the product make efficient use of resources? Does the product use energy, fuel or water more efficiently or uses less paper, ink, light or other resources?*
- *Is the product recyclable (and do local facilities exist that are capable of recycling the product at the end of its useful life)?*
- *Is the product biodegradable (will it take a long time to decompose in landfill)?*
- *Does the product contain recycled material? Do we really need to buy a virgin product when the recycled version is of the same quality?*
- *Does the product have minimal packaging and/or for which there will be take-back by the manufacturer/supplier of packaging?*
- *Does the product have minimal content and use of toxic substances in production and final product?*
- *Is the product purchased from local supplier, which minimizes the ecological footprint, such as transportation and packaging cost?*
- *Can the additional cost accounted for improved quality be reimbursed in lower operating costs over 5 years? If you are unsure about how to calculate the total costs of buying, operating and disposing of a piece of equipment (known more commonly as Whole Life Costing) please contact the Procurement Office who can assist you.*
- *Does the supplier have ISO 14001, another Environmental Management Standard or other Eco-Label that meets certain standards?*
- *For disposal, the University has an agreement in place with Transform who will arrange uplift without charge.*

5.9. Are there sustainability requirements or guidelines for events hosted at the institution?

Every event hosted at the institution **must** abide by sustainability criteria. (2 points)

The institution **strongly recommends or incentivizes** sustainability measures, but they are **not required**. (1 point)

There are **no** sustainability guidelines for institution events. (0 points)

Score Assigned:

1

Score explanation:

No mandatory guidelines observable currently. But, the School of Medicine has a Sustainable Events, Food and Beverage Policy, which highlights recommended sustainability measures. In a recent university event, instead of providing disposable cups, people were encouraged to bring their own cups and flasks, showing that efforts are being made in the right direction.

5.10. Does your institution have programs and initiatives to assist with making lab spaces more environmentally sustainable?

Yes, the institution has **programs** and **initiatives** to assist with making lab spaces more environmentally sustainable. (2 points)

There are **guidelines** on how to make lab spaces more environmentally sustainable, but not programs or initiatives. (1 point)

There are **no** efforts at the institution to make lab spaces more sustainable. (0 points)

Score Assigned:

2

Score explanation: Insert explanation here.

The University has signed up to the [UK Concordat for the Environmental Sustainability of Research](#).

In a Youtube video made by the University of Dundee titled “Investment in sustainability at University of Dundee”, several projects are described in relation to making lab spaces more sustainable.

- *The University has appointed a sustainability officer who has been promoting lab recycling initiatives such as recycling pipettes tips and gloves (these had not been previously recycled)*
- *There are also initiatives towards purchasing more environmentally friendly solvents, waterless condensers and heating blockers.*

Medical School Sustainability Strategy has stated that they aim to “ green’ our lab spaces”.

- *The School of Medicine has registered to participate in the ‘My Green Lab Freezer Challenge’, where the freezers were decreased from -80 degrees Celsius to -70 degrees Celsius.*
- *Through Newsletters, the Webpage and a Sharepoint, timers are advertised to reduce energy use.*
- *A circular economy strategy is being employed*
 - *Unused stationery is being placed in a convenient location to be reused*
 - *To reduce our carbon footprint, machinery and kit that is not being used is being donated.*
 - *To reduce unnecessary equipment procurement, extra materials are being shared.*
 - *Lab equipment recycling is being improved*
- *Energy use is being minimised by promotion of shutting down safety cabinets and reducing sash height on fume hoods.*
- *Staff are also being educated on recycling and various means to save resources.*

5.11. Does your <u>institution's</u> endowment portfolio investments include fossil-fuel companies?			
The institution is entirely divested from fossil fuels and has made a commitment to reinvest divested funds into renewable energy companies or renewable energy campus initiatives. (4 points)			
The institution is entirely divested from fossil fuels. (3 points)			
The institution has partially divested from fossil fuel companies or has made a commitment to fully divest , but currently still has fossil fuel investments. (2 points)			
The institution has not divested from fossil-fuel companies, but faculty and/or students are conducting organised advocacy for divestment. (1 point)			
Yes, the institution has investments with fossil-fuel companies and there have been no efforts to change that. (0 points)			
Score Assigned:	3		
<p><i>Score explanation:</i></p> <p><i>The University of Dundee has completely divested from fossil fuels. This is stated on the University web page as well as the Global Fossil Fuel Divestment Commitments Database, where it is stated as a full divestment.</i></p> <p><i>Furthermore, "the University has also confirmed that half of its managed investments have been moved to a sustainable investment portfolio, with the remaining half to be transferred before the end of the month" as of 2021.</i></p> <p><i>"The CAPG group ensures that the c£30m endowment assets are invested with regards to the University's ethical investment policy. All these assets are invested in a sustainability portfolio which ensures that all those assets have an explicit link to delivery of at least 1 UN sustainable development goal."</i></p> <p><i>Though, this means that there will be no further investment by the university into fossil fuels, it does not commit specifically into renewable energies.</i></p> <p>1. https://www.dundee.ac.uk/stories/university-completes-divestment-fossil-fuels 2. https://www.dundee.ac.uk/corporate-information/carbon-management-plan 3. https://www.dundee.ac.uk/corporate-information/ethical-investment-policy</p>			
<table border="1"> <tr> <td>Section Total (21 out of 32)</td><td>65.63%</td></tr> </table>		Section Total (21 out of 32)	65.63%
Section Total (21 out of 32)	65.63%		

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Grading

Section Overview

This section focuses on the grading of the report card. The institution received a grade for each of the individual sections as well as an overall institutional grade. Section point totals were tallied, divided by the total points available for the section, and converted to a percentage. The overall institutional grade is a weighted average of the section grades, with curriculum receiving a higher weight owing to its larger number of metrics. Letter grades for each section and the institution overall were then assigned according to the table below.

Letter Grade*	Percentage
A	80% - 100%
B	60% - 79%
C	40% - 59%
D	20% - 39%
F	0% - 19%

**Within each grade bracket, a score in the top 5% (_5 to _9%), receives a “+”, and a score in the bottom 5% (_0- _4%) receives a “--”. For example, a percentage score of 78% would be a B+.*

Planetary Health Grades for the University of Dundee School of Medicine

The following table presents the individual section grades and overall institutional grade for the University of Dundee School of Medicine on this medical-school-specific Planetary Health Report Card.

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(60/72) \times 100 = 83.33\%$	A-
Interdisciplinary Research (17.5%)	$(11/17) \times 100 = 64.71\%$	B-
Community Outreach and Advocacy (17.5%)	$(12/14) \times 100 = 85.71\%$	A
Support for Student-led Planetary Health Initiatives (17.5%)	$(10/15) \times 100 = 66.67\%$	B
Campus Sustainability (17.5%)	$(21/32) \times 100 = 65.63\%$	B
Institutional Grade	$(83.33 \times 0.3 + 64.71 \times 0.175 + 85.71 \times 0.175 + 66.67 \times 0.175 + 65.63 \times 0.175) = 74.47\%$	B

Report Card Trends

Section Overview

This graph demonstrates trends in overall and section grades for the years in which University of Dundee School of Medicine] has participated in the Planetary Health Report Card initiative.

